

ABSTRACT INCORPORATING REQUESTED CHANGES

In a radiation-emitting semiconductor component with a layer structure comprising an n-doped confinement layer, a p-doped confinement layer, and an active, photon-emitting layer disposed between the n-doped confinement layer and the p-doped confinement layer, it is provided according to the invention that the n-doped confinement layer is doped with a first n-dopant (or two mutually different n-dopants) for producing high active doping and a sharp doping profile, and the active layer is doped with only one second n-dopant, different from the first dopant, for improving the layer quality of the active layer.